

Biogas plants in fighting climate change



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Background:

Biogas plants are one of the ways how to use renewable energy sources in producing electricity and heat energy. Unfortunately, huge number of these plants focuses only on transformation of biogas to electricity without using heat energy generated in that process. It means that huge amount of heat energy being released directly into the atmosphere.

In the planning stage of the biogas plant building (2015.), a letter of intentions was signed between the city of Zrenjanin, to support the project and adequately take over the produced heat energy for heating public facilities in Botoš village. The basis and reason for these intentions come from the commitment to achieve the goals and obligations as a signatory of the "Covenant of mayors".



Best practice particular goals:

- Reducing heat emission
- Reducing CO₂ emission
- Lower heating costs for local budget(s)
- Strengthen local confidence by implementing Public-private partnership
- Strengthen local corresponding businesses

Realisation:

The city of Zrenjanin turned to the GIZ DKTI project "Development of a sustainable bioenergy market in Serbia" (2018.) for technical support in the analysis of alternative supply solutions for public buildings purposes in Botoš with thermal energy from the biogas power plant.

According to the Serbian legislative, the best solution has been find out through Public-private partnership between biogas plant and the city of Zrenjanin.

Applicability in the wider Danube region → Highly likely:

All biogas plants that are relatively close to public facilities and not use generated heat energy could consider partnership with local authorities in order to use produced heat instead of "throw it away".



Generated heat could be used in other ways i.e. in heating both own or neighbouring animal farms as well as own household

References:

- <https://biogas.org.rs/en/>
- <http://www.zrenjanin.rs/sr-lat/vesti/2020/03/biogas-postrojenja-u-srbiji-energetska-sansa-i-za-manje-lokalne-zajednice-poput-botosa>
- <https://germancooperation.rs/giz/>
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